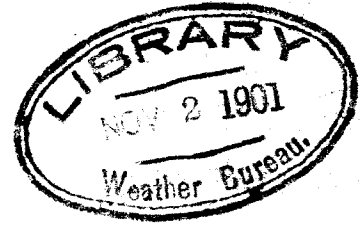


CHINA.

IMPERIAL MARITIME CUSTOMS.

II.—SPECIAL SERIES: No. 2.



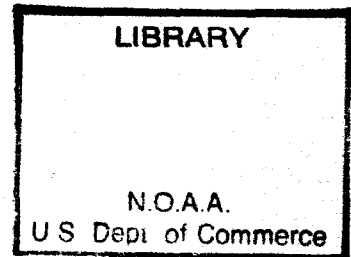
MEDICAL REPORTS,

FOR THE HALF-YEAR ENDED 31st MARCH 1899.

57th Issue.

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PUBLISHED BY ORDER OF
The Inspector General of Customs.



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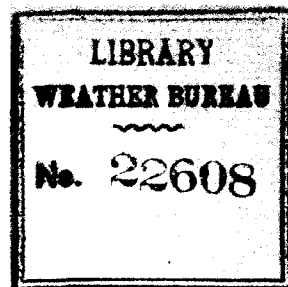
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National Oceanic and Atmospheric Administration

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Beltsville, MD
December 20, 2000

INSPECTOR GENERAL'S CIRCULAR No. 19 OF 1870.

INSPECTORATE GENERAL OF CUSTOMS,

PEKING, 31st December 1870.

SIR,

1.—It has been suggested to me that it would be well to take advantage of the circumstances in which the Customs Establishment is placed, to procure information with regard to disease amongst foreigners and natives in China; and I have, in consequence, come to the resolution of publishing half-yearly in collected form all that may be obtainable. If carried out to the extent hoped for, the scheme may prove highly useful to the medical profession both in China and at home, and to the public generally. I therefore look with confidence to the co-operation of the Customs Medical Officer at your port, and rely on his assisting me in this matter by framing a half-yearly Report containing the result of his observations at.....upon the local peculiarities of disease, and upon diseases rarely or never encountered out of China. The facts brought forward and the opinions expressed will be arranged and published either with or without the name of the physician responsible for them, just as he may desire.

2.—The suggestions of the Customs Medical Officers at the various ports as to the points which it would be well to have especially elucidated, will be of great value in the framing of a form which will save trouble to those members of the medical profession, whether connected with the Customs or not, who will join in carrying out the plan proposed. Meanwhile I would particularly invite attention to—

a.—The general health of.....during the period reported on; the death rate amongst foreigners; and, as far as possible, a classification of the causes of death.

b.—Diseases prevalent at.....

c.—General type of disease; peculiarities and complications encountered; special treatment demanded.

d.—Relation of disease to { Season.
Alteration in local conditions—such as drainage, etc.
Alteration in climatic conditions.

e.—Peculiar diseases; especially leprosy.

f.—Epidemics { Absence or presence.
Causes.
Course and treatment.
Fatality.

Other points, of a general or special kind, will naturally suggest themselves to medical men; what I have above called attention to will serve to fix the general scope of the undertaking.

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3.—Considering the number of places at which the Customs Inspectorate has established offices, the thousands of miles north and south and east and west over which these offices are scattered, the varieties of climate, and the peculiar conditions to which, under such different circumstances, life and health are subjected, I believe the Inspectorate, aided by its Medical Officers, can do good service in the general interest in the direction indicated; and, as already stated, I rely with confidence on the support and assistance of the Medical Officer at each port in the furtherance and perfecting of this scheme. You will hand a copy of this Circular to Dr., and request him, in my name, to hand to you in future, for transmission to myself, half-yearly Reports of the kind required, for the half-years ending 31st March and 30th September—that is, for the Winter and Summer seasons.

4.—

* * * * *

I am, etc.,

(Signed) ROBERT HART,

I. G.

THE COMMISSIONERS OF CUSTOMS,—*Newchwang, Shanghai,*
Tientsin, Ningpo,
Chefoo, Foochow,
Hankow, Amoy,
Kiukiang, Swatow, and
Chinkiang, Canton.

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The Contributors to this Volume are:—

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HERBERT J. HICKIN, M.B.	Ningpo.
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A. THOULON, M.D.	Lungchow.
E. REYGONDAUD, M.D.	Mengtsz.

DR. JOHN FRANCIS MOLYNEUX'S REPORT ON THE HEALTH OF CHEFOO

For the Year ended 31st March 1899.

THE 12 months terminating 31st March 1899 have presented few points of medical interest. The general health has been excellent, and no epidemic has prevailed.

Births and Deaths.—14 births (five female and nine male) are recorded, and nine deaths occurred. The above numbers include those occurring in the practices of my colleagues as well as in my own work. Of the deaths, the following particulars are given:—

SEX.	AGE.	CAUSE.
Female.....	62	Cancer (stomach).
Male.....	25	Dysentery.
Female.....	22	"
Male.....	64	Epithelioma.
".....	38	Cerebral abscess.
".....	36	" hæmorrhage.

The remaining three were infantile cases.

H.B.M. Squadron.—The period under review has been rendered interesting by the fact that for some months the number of foreigners was greatly augmented by the presence of a squadron from H.B.M. fleet. At one time approximately 10,000 men were within the port limits, and naturally a certain amount of sickness and a few fatal cases from the men-of-war increased our invalid and death rates. A number of patients were landed for treatment ashore, and, after the departure of the main squadron, H.B.M.S. *Iphigénia* sent several cases of variola to the French Hospital.

The presence of the squadron materially influenced the condition of the usual residents. Provisions, especially milk, vegetables, etc., rose to high prices, and the washing of linen became a difficult and expensive problem. This incident was, from a sanitary standpoint, of no little importance; and large quantities of soiled linen were passed through water of a foul character and returned as cleansed.

Health of the Port.—Notwithstanding these extraordinary circumstances, the health of the port has been highly satisfactory. The alterations on the foreshore (now long since effected) have increased the sanitary condition of the neighbourhood. There has been no malarial fever other than of a trixial type (unless introduced by visitors), and Chefoo as it now is well deserves to be regarded as a health-giving resort.

Malaria and Methyl Blue.—My predecessor, after careful research, held a theory to the effect that in this neighbourhood there existed a specific microbe influencing malarial fever, which resisted most of the well-known antifebrile remedies—quinine, arsenic, etc.,—but could

not exist if acted upon by methyl blue. My personal experience (which I give not intending to question my predecessor's able work and known ability, but in the interests of truth and of this port) does not bear out his conclusions. Very little malarial fever has troubled us during the past 12 months; such trivial cases as I have met have yielded readily to the well-known remedies, and I have not administered one dose of methyl blue since my arrival here, 15 months ago.

Typhoid.—Two cases of typhoid fever have been under treatment—one a child of 7, the other a female adult. No complications occurred in either case.

Variola (unvaccinated).—A case of confluent small-pox occurred in the Settlement. The patient, aged 2, was unvaccinated. After a severe experience the infant made a good recovery. There were three other children in the family, all vaccinated, who escaped infection.

Scarlatina.—Three cases of scarlatina (one adult and two infants) were under treatment. These were all benign and uncomplicated cases.

Dysentery.—During the latter half of September we experienced an exceptionally severe storm, accompanied by heavy rains. The crops, recently gathered, had left behind the usual *débris*, which probably were (in their decaying condition) washed into the surface wells outside, but in the neighbourhood of, the foreign Settlement. In this district, and within a few days of the storm, eight cases of hæmorrhage from the rectum were under my care. All were children, and the attacks were coincident in point of time. They failed to yield to ordinary dysenteric remedies, which I at first exhibited, because at this time there was a severe case of dysentery in the French Hospital (verified by postmortem examination).

These cases passed blood in considerable quantities. There was but slight elevation in temperature, in about half of the patients only, and very little pain or inconvenience. The duration was from five to eight days, in one instance continuing to the tenth day. Rectal injections of solution of nitrate of silver appeared to meet the requirements of the case.

Epithelioma and a Warning as to Treatment.—A case of epithelioma was interesting from the fact that the sufferer had, at considerable expense, been under the treatment of an irregular and advertising practitioner in a distant country by the medium of correspondence. The temporary disappearance of the tumour was hailed with gratification by a number of people, not only here but in other ports, and the fame of the advertised "infallible remedy" was almost eclipsing the modest reputation of legitimate practitioners, when the inevitable recurrence occurred, associated with suppuration, and finally erysipelas proved fatal to the sufferer.

My colleague, Dr. GULOWSEN, has kindly furnished me with information respecting his last 12 months experiences, and I am indebted to Captain PATERSSON, the Harbour Master, for the accompanying excellent meteorological report.

In conclusion, I regard Chefoo as an exceptionally healthy place, and, taking into consideration its delightful climate, the ever-varying interest excited by visiting warships of many nationalities, and its proximity to such points of interest as Weihaiwei and Port Arthur, this port stands eminent as a health resort and place of residence.

METEOROLOGICAL TABLE, 1898.

MONTH.	TEMPERATURE.			RAINFALL.		No. of Hours Fog.	BAROMETER.		REMARKS.
	Max.	Min.	Mean.	No. of Hours.	Quantity.		Highest.	Lowest.	
	° F.	° F.	° F.		Inches.		Inches.	Inches.	
January	51	22	33.3	5	0.10	...	30.650	30.150	Mean temperature slightly above the average. Unusually cold; minimum temperature lowest during the year.
February	54	19	34.1	19	0.74	25	30.510	29.890	
March	75	17	38.1	19	0.23	...	30.610	29.760	
April	88	29	54.0	14	1.44	14	30.560	29.630	Normal, though previous cold month retarded the spring.
May	89	43	65.2	3 $\frac{3}{4}$	0.07	26	30.250	29.720	As usual, dry; hot and dry winds less frequent than in previous years.
June	95	58	73.2	36	3.95	15	29.965	29.128	Normal.
July	97	61	78.4	51 $\frac{3}{4}$	13.37	32	29.934	29.384	Greatest rainfall on record and weather throughout tropical and damp.
August	88	66	76.9	78	6.17	2	29.972	29.360	Warm and damp, the latter caused by typhoons pass- ing close to Shantung coast.
September	83	57	70.9	47	2.30	...	30.268	28.880	Normal.
October	85	41	65.3	13	0.75	...	30.530	29.680	Normal and very fine.
November	66	27	49.7	23 $\frac{1}{2}$	0.76	...	30.560	30.024	
December	59	23	44.0	66 $\frac{1}{2}$	0.86	...	30.710	29.830	

NOTE.—Total rainfall for the year, 30.72 inches, including melted snow.

DR. JAMES H. McCARTNEY'S REPORT ON THE HEALTH OF CHUNGKING

For the Year ended 31st March 1899.

THE health of the foreign community during the last 12 months has been good. Two births and one death occurred. The person who died was not a resident of this place, but was taken ill several days distant from Chungking and returned here for treatment. In this case I was not the attending physician and did not hear the cause of death.

The hot season was unusually long, with a higher range of temperature than I have known for the past nine years. As will be seen by the meteorological table, our warm weather began in June and lasted well into September. The highest reading was 108° F., in July. Although the heat is very trying, it is frequently broken by several days of rain and cloudy weather, which render the summers bearable and residence on the hills very pleasant. With the exception of a night now and again, the writer has spent the whole of eight consecutive summers within the city walls. As a rule, the days and nights are fairly comfortable, except during two or three weeks in August, when there is little rain and more sunshine. Should the sun not shine for 10 days or a fortnight at a time and there be a period of drizzling rain, people are heard to remark that that is typical Chungking weather. It may be so, but I am persuaded that it is the very best kind of weather for Chungking. If we had the sun from November to March as much as most people desire, I am convinced that the city would merit the description sometimes applied to it of being the unhealthiest city in China; but as it is, with little sunshine, experience during the nine years that the port has been open proves that Chungking is one of the healthiest ports in China. The nearness of the mountains enables a person feeling indisposed to take a thorough change without much effort and without necessitating absence from work for any great length of time.

The number of cottages south of the city has considerably increased during the past year. These buildings are all within easy reach of good spring water, and, as far as my knowledge goes, there was no case of sickness in any of them throughout the summer. The majority are built about 1,200 feet above the river, mostly of bricks and mud. The temperature at this elevation is several degrees lower than in the city, and at night the difference is very marked.

Last August the river rose to a greater height than, as the natives tell us, has been known for 20 years. The lower end of the city was entirely under water, and all the water gates but one were closed to traffic. Boats in going in and out of the city generally took their passengers from the top of the city wall.

Remittent Fever.—There was a marked falling off in the number of remittent fever cases. This is the usual result when the heavy rains come early and are unaccompanied by sunshine, whereas with slight showers and plenty of sunshine the number of cases increases. The months

in which remittent fever is most prevalent are February, March, and April, due to the almost entire absence of rain in the immediately preceding months (thus depriving the streets of their natural cleansing) and to the effect of the higher temperature on the organic accumulations. The germination of malaria is fortunately retarded to a certain extent by the lack of sunshine at that period. Two foreigners had slight attacks during the year, which ran the usual course of about two weeks. The treatment that proved most successful was 20 grains of quinine, together with 5 grains of salol or salicine, every three hours, commencing at 4 A.M. It usually reduces the fever in a few days. I always commence the treatment with a purge of 6 or 8 grains of calomel, 2 grains being given every hour. Under foreign treatment there are no sequelæ, but under native treatment very marked—

- (a.) Anaemia.
- (b.) General anasarca.
- (c.) Peripheral neuritis.

I have heard the statement, and seen it in print, that opium-smoking is a prophylactic against malaria. My experience has been to the contrary. An opium-smoker seems to suffer from malaria as readily as those who do not smoke, and when he does contract fever the chances of recovery are against him. There is a very high mortality among opium-smokers attacked by remittent fever.

Epidemics.—No epidemics have visited us during the year. Diphtheria occurs endemically every spring, but I have never known a diphtheria epidemic, which seems very remarkable. The natives expectorate everywhere and take no precautions against infection, but still the disease does not seem to spread. The following cases in the same family will illustrate what I mean. The husband suffered from diphtheria, and died before I saw him. His two children contracted the disease, and, coming under treatment, recovered. An aunt, who helped to nurse the children, was likewise attacked and returned to her husband's home, where I saw her on the eighth or ninth day of the disease. She died within a few days. No other member of the family contracted the disease, although during the woman's illness at least 20 children entered her room. From our knowledge of the disease it would appear that in China every condition is favourable to its spread; that it does not is extraordinary.

Pulmonary Tuberculosis.—I believe that in Chungking more people, both young and old, die from this disease than from any other complaint. The conditions which tend to its spread are as follows:—

- (a.) The damp, heavy atmosphere.
- (b.) The habit of expectorating everywhere.
- (c.) (In young girls) early marriage, before the menstrual period.
- (d.) Sedentary habits of the Chinese (they cannot be compelled to take exercise).
- (e.) (In young men) the wholesale practice of self-abuse at an early age.
- (f.) The scrofulous tendency in the Chinese.

I have attended one foreigner who had frequent hæmorrhages, but who came here in the incipient stages of phthisis. His condition will not improve in this climate, but rather the reverse. I would never advise anyone with a tendency to lung troubles to come to Chungking.

I have had several apparent cures of incipient phthisis; at least, the disease has been arrested. The value of cod-liver oil, together with all its preparations, in the treatment of this disease is becoming well known to the Chinese.

Bronchitis, chronic and acute, is very common among the Chinese. Foreign children up to the age of 3 years are constant sufferers from bronchitis during the winter months, but after that age they seem to have immunity from it. I have found malt and cod-liver oil serve as a prophylactic against recurrent attacks.

Dysentery among foreigners is not common, and most of the cases are due to some indiscretion in diet or to uncooked vegetables or salads.

Cholera Belts, so called.—I believe that the value of these articles of dress is over-estimated, and that very often they do more harm than good. I have attended more cases of bowel trouble among those who are constant wearers of the belt than among those who have never worn it. Many persons have come to China wearing the belt on the advice of their home physician, thinking it the only sure preventive against cholera. I have treated several patients for chronic bowel trouble, who made a rapid recovery when they discarded the belt. Part of the danger lies in the belt working up under the arms during the unconscious hours of sleep, when the abdomen, being deprived of its artificial warmth, is predisposed to any chilling influence.

Cæsarean Section was performed once. The patient was a primipara, 44 years of age. She came by her pregnancy unlawfully (if it had not been for this I should probably not have had the chance of an operation). She had been in labour eight days, and for the past two days had taken no nourishment. I found her in a very weak condition. Examination showed unusual narrowing of the pelvic inlet by osteomalacia formations, to such an extent that two fingers could hardly be inserted. With great difficulty I succeeded in perforating the head, but, after trying every known means, I abandoned the attempt to deliver by natural canal. The woman was in a fair condition, and as opening the abdomen afforded the only hope, her friends consented to the operation. The abdomen was opened by an ordinary incision, and the child (an unusually large one) was delivered without any trouble. The hæmorrhage was very slight. The uterine walls were stitched together with silkworm gut. The peritoneum and abdomen were drawn together with silk and the ordinary dressing applied. Iodoform gauze drainage was put in. No liquid escaped into the abdomen, and the whole operation only occupied about eight minutes. The patient was put to bed in good condition, pulse about 110, with no signs of shock. About four hours after operation shock came on, and death resulted in about half an hour.

Maternity Cases.—For the past eight years I have treated, on an average, over 20 labour cases a year. Foreign medical treatment is only sought in cases where labour has begun for several days, and when the Chinese midwife has abandoned all hope. A very large per-centage are cases of deformed pelvis through osteomalacia. I have met with some of this class where there was not room for the insertion of two fingers and an instrument. In four or five nothing could be attempted but Cæsarean section; but as the patients would not consent to an operation, there was naught to be done but let them die. In shoulder presentations the midwives are unable to do anything, and they invariably pull off an arm in their frantic efforts to deliver. To

illustrate, I will give an instance which happened a few months ago. I was called to see a patient who had been in labour for several days; the midwife had pulled one arm off and was at work on the patient when I arrived. She was seated on the bed, between the patient's legs, using an iron hook in the endeavour to extract the child piecemeal. The patient was almost pulseless and nearly dead from loss of blood and pain from the operation. It was with difficulty that I had the midwife sent away, as she persisted in saying that the child's head was coming, etc. The patient was covered with blankets. A hypodermic of digitalis was given, and in a short time she rallied; I then gave chloroform, amputated the arm, and turned the child without any difficulty. When the child was delivered I found that the midwife had been pulling and tearing at the back, instead of the head as she supposed. This is only one instance of many which are happening constantly.

For the appended meteorological table I am indebted to the Tidesurveyor, Mr. W. G. HARLING:—

METEOROLOGICAL TABLE, April 1898 to March 1899.

MONTH.	BAROMETER.		THERMOMETER.			RAINFALL.		RISE AND FALL OF RIVER.	
	Highest.	Lowest.	Highest.	Lowest.	Mean.	No. of Days.	Quantity.	Highest.	Lowest.
1898.	<i>Inches.</i>	<i>Inches.</i>	<i>° F.</i>	<i>° F.</i>	<i>° F.</i>		<i>Inches.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>
April.....	29.799	28.955	97	53	62.0	8	5.54	16 4	1 8
May.....	29.445	28.913	90	66	74.1	19	4.83	24 4	7 2
June.....	29.366	28.988	101	66	79.8	18	6.14	40 11	11 3
July.....	29.365	28.984	108	69	88.4	9	1.53	61 10	23 4
August.....	29.395	28.943	105	88	86.3	9	2.45	101 0	28 0
September.....	29.613	29.092	101	63	78.4	9	4.00	54 3	27 3
October.....	29.844	29.293	89	50	66.3	11	2.25	31 3	15 10
November.....	29.967	29.231	78	45	58.5	8	2.54	20 9	8 3
December.....	29.968	29.512	57	41	48.5	6	0.29	8 3	3 9
1899.									
January.....	30.011	29.481	58	29	50.1	9	0.67	3 8	2 0
February.....	29.960	29.260	68	37	54.0	11	1.02	4 2	1 5
March.....	30.008	29.146	78	54	65.2	12	2.25	4 10	2 2

DR. HERBERT J. HICKIN'S REPORT ON THE HEALTH OF NINGPO

For the Half-year ended 31st March 1899.

THE health of the foreign community for the period under review has been good.

The winter has been bracing, but not excessively cold.

There have been no really anxious cases of disease, and no deaths. The vigour and strength of the community, which are usually much reduced during the hot summer and early autumn months, have been restored to the normal.

There has been only one case of epidemic disease in the Settlement, and three cases of whooping-cough amongst other members of the foreign community. The case of epidemic disease alluded to was that of a mild eruptive fever with slight pains in the limbs and a scarlet efflorescence commencing at the back of the ears, thence diffusing itself over the trunk, limbs, and face. The fever declined, but reappeared after an interval of about 36 hours, and declined again in about 24 hours, though continuing visible under the skin for a longer period. The features of the disease did not resemble either scarlet fever, measles, or influenza. Amongst the natives about a dozen cases of the same fever came under my observation. Taken altogether, the disease, though milder than the classical descriptions of dengue, would seem to fall most naturally under that designation, and is probably a mild form of it. If not dengue, then it must be a new disease most nearly allied to it. In the majority of cases seen it was an extremely simple fever, running a course of a few days, and ending in complete recovery without sequelæ. In some cases there were pain in the eyeballs, frontal headache, pain in the joints, cough, and an eruption appeared in the palms of the hands.

In the autumn and spring there are a good many cases of sore throat, characterised by hyperæmia of the tonsils, pillars of the fauces, uvula, and back of the pharynx, and by the presence of small, scattered vesicles on these parts, but more especially studding the back of the pharynx. As the disease declines, a dirty-white coating appears on the back of the pharynx, and sometimes on the tonsils as well, through which the clear vesicles appear. Local treatment, with quinine, antipyrin, or phenacetin, to allay the slight feverishness, is all that is required. Salicylate of soda is also efficacious. The relaxing climate of Ningpo has probably much to do with the frequency of the ailment. It is often attended with a dry, harassing cough, which, if not attended to, lasts for many weeks.

INFLUENZA.

Four Chinese girls in a mission boarding-school were attacked with high or moderate fever, obstinate vomiting of yellow bile-stained material, pains in the side and back, and constant cough with acute bronchitis. In one case the temperature rose to 105° F., and continued at 105° F. or 104° F., night and morning, for about four days.

Treatment.—Quinine, antipyrin, and phenacetin were of little use, and had a very slight effect on the temperature, which rose again in the course of a few hours to its former height. Salicylate of soda in 10-grain doses was of material use, and seemed to cut the disease short in three or four days.

Sequelæ.—The first patient, the one alluded to above as having high fever, had marked dullness on percussion over the apex and front of the right lung, with crepitant râles and other signs of commencing phthisis. All the other patients made good recoveries.

Influenza at Hangchow in 1890.—As this outbreak differs somewhat from that observed in 1890 in Hangchow, it may be of interest to append notes of influenza as observed there in that year.

In the commencement of June, during dry, warm weather, influenza suddenly broke out, and during the course of 48 hours 35 boys out of a school of 40 were rendered prostrate by it. The symptoms were fever (101° – 104° F.), cough, giddiness, and, in some cases, severe vomiting and diarrhœa, with abdominal pain and soreness all over the abdominal regions. The fever was attended by great depression, headache, and restlessness. Almost the whole of the foreign community were likewise attacked, and amongst the natives there was a considerable mortality when treated by native doctors or left untreated.

Treatment.—Antipyrin and stimulant cough and diarrhœa mixtures, together with careful dieting and recumbency, proved most successful. Quinine was also found of benefit, especially as a tonic after the fever had declined.

The cough was hacking, dry, and harassing. Hot weather speedily came on and the epidemic declined, but reappeared about 1st November and in a more severe form. The symptoms now observed were severe pains in the limbs, intense headache, vomiting, severe abdominal pains, diarrhœa, fever (104° F.), throbbing of temples, pain in the eyeballs, giddiness, cough, nausea, together with burning sensation in the throat, eyes, scalding sensation in micturition and defecation.

The principal types were—

1. *Catarrhal.*—Sore throat, cough, fever, headache.
2. *Nervous.*—Giddiness, throbbing of temples, headache (with or without fever), sleeplessness, restlessness.
3. *Abdominal.*—Pains in abdomen, vomiting, diarrhœa, fever, nausea.

Prostration was common to all the types.

Complication and Sequelæ:—

Pleurisy.
Pneumonia.
Bronchitis.

Prostration was a far more marked feature in the autumn than in the earlier epidemic, and led to a higher mortality. Many natives died in a few hours. Convalescence was more prolonged in the autumn attack, and was not complete for many weeks; cough, too, often appeared during convalescence when not present from the outset. Relapses also were common.

Appetite was lost, and the sense of taste often utterly gone. The taking of food became a loathing idea. The disease often commenced with coldness of the extremities without any rigor or chills. The only feature common to both epidemics was dryness of the atmosphere. In both spring and autumn the weather was bad for taking colds. In November the air was dry and sharp, with bright sunshine. No rain had fallen for many weeks.

Causation.—Obscure, probably due to the infection of the system with some kind of bacteria, and either these or their products would seem to be of very acrid nature, causing the burning of the eyes, throat, abdominal irritation, the scalding in micturition and during defecation.

The breath was offensive and the motions very fetid.

DR. B. STEWART RINGER'S REPORT ON THE HEALTH OF CANTON

For the Year ended 31st March 1899.

IN the closing paragraph of my Report for the year ended 31st March 1898* I noted that bubonic plague had commenced in the Canton city, but had not at that time reached alarming proportions. Subsequently, however, it assumed the character of a serious epidemic, in all probability equal in severity to the outbreaks of 1894 and 1896, although, in the absence of any reliable statistics from Chinese sources, it is impossible to make any comparative computations of value. There existed, however, a complete panic amongst the Chinese, and great numbers of the well-to-do natives, in order to escape the terror of their surroundings, left the city with their wives and families, some to seek their country residences, others to occupy large and well-made house-boats, many of which were to be seen anchored in various parts of the Canton River. In this connexion it is worthy of note that the boating population of Canton is credited with a complete immunity from the disease; and in view of their cleanly habits and open-air lives, there is every reason to place confidence in this belief. It is true that cases were found from time to time on the boats, but were doubtless usually traceable to infection brought from the shore.

The epidemic raged fiercely till July, towards the middle of which month it began to subside.

During the epidemic the sights around Shamien were somewhat appalling: dead bodies in various stages of decomposition were frequently seen floating down the river in close proximity to the Bund; indeed, the landing-steps seemed to have a peculiarly attracting influence upon them, and I have myself seen no less than three corpses lying exposed on the ground in the short distance from the east bridge to the steamer wharf.

By the end of July the panic had quite ceased, and many natives returned to their homes in Canton; and though the epidemic may be considered to have ended at that time, doubtless many cases occurred for some time subsequently.

As in Hongkong, so here, an outbreak of rinderpest took place during the early summer months, and the Shamien Dairy Company lost so many animals that, unfortunately, the farm had to be closed for a time; and when no more milk could be obtained, the true value of the institution was fully realised. I am glad, however, to be able to state that subsequently new premises were secured, a fresh supply of healthy animals obtained, and excellent milk again supplied.

* Customs *Medical Reports*, lv.

The usual tropical and other complaints, as noted in the last Report, were treated, malarial fevers and diarrhœa ranking high in the list. Of the latter, those cases which were neglected by the patient or treated at once by himself with astringents were the most difficult to deal with, whereas those seen early usually yielded quickly to the simple treatment of castor oil with restricted diet and rest.

It is very pleasing to be able to note that during the 12 months under review no case of typhoid fever has to be recorded, which speaks well, I think, for the improved sanitation in certain localities where several cases had occurred previously. There was also a notable absence of that febrile epidemic noted in September and October 1897.

A number of cases of otorrhœa and conjunctivitis presented themselves during the wet season. One unusual cause of the latter complaint, in one eye, was found to be due to an eyelash having insinuated itself beneath the margin of the caruncle, where it remained concealed for several days, setting up a considerable amount of inflammation and discomfort, increased by the frequent rubbing applied, which rapidly subsided, however, on the removal of the irritating lash.

Eight births and two deaths have to be recorded. Both the latter were due to exhaustion from chronic diarrhœa.

Amongst the children whooping-cough, measles, chicken-pox, and diarrhœa were encountered, also some cases of infantile convulsions, chiefly, however, of a mild character, with the exception of one unusually severe and prolonged case of convulsions occurring in the course of dentition in a strong and well nourished child, probably too quickly developed, as the eruption of the four first molars commenced at the age of 11 months. The child had been restless and irritable, and one afternoon in November was seized with a convulsion; this was the precursor of several hundred attacks during the subsequent months of dentition. Some of the fits were very slight and transitory and others more severe; the gums of both upper and lower jaw were freely lanced, and this operation was frequently repeated; furthermore, hot baths, sinapisms, emetics, rectal injections, calomel, santonin, quinine, chloroform, hydrate of chloral, bromide of potassium, valerian, and ammonia were each exhibited in turn, but without any very satisfactory result. The drug, however, which proved of the greatest service throughout was bromide of potassium, and given in 1-grain doses, or even less, every three or four hours was usually found to have a soothing influence on the nervous system between the attacks. The convulsions varied greatly in type, ranging from the most violent spasms, which shook every muscle of the body, caused the eyes to be drawn to one side and the face to become congested, to a slight contraction of the facial and cervical muscles merely, producing a fixed expression, which passed off in a few seconds, and, but for the careful and constant manner the child was watched both night and day, might easily have escaped notice. The four first molars were slow in erupting, and the little patient suffered severely as each point appeared through the gum; but at length the process was complete, and a respite from all bad symptoms occurred, and every hope was entertained of complete recovery; for so great was the vigour of this child, and so carefully and frequently had simple and nutritious food been administered and assimilated, that, notwithstanding the amount of medication necessitated and the continued repetition of

the enervating attacks, his digestion remained sound and he had positively gained in weight. All went well for several weeks, when it soon became evident that all four canines were causing further irritation. Prompt measures were again resorted to, notwithstanding which the previous troubles returned, though, I am happy to say, the attacks were of a milder type. Up to the present time the canines are not fully protruded, and the nerve irritation still continues; still I have every hope that the good digestion and strong constitution of this little patient will help to restore him to complete health.

DR. RODERICK J. J. MACDONALD'S REPORT ON THE HEALTH OF WUCHOW

For the Half-year ended 31st March 1899.

DURING the past six months there has been one birth, but no death, in the foreign community here. The season has been unusually dry, yet the general health of the population has not been worse than usual.

RESIDENCES.

Some of the cases of illness among foreigners, such as small-pox, scarlatina, dysentery, and malarial fever, might have been avoided had the foreigners been suitably housed at some distance from the Chinese.

The Imperial Maritime Customs, the British Consulate, and the Alliance missionaries have acquired hill-top sites. Messrs. JARDINE, MATHESON, & Co. are building their business house by the river bank; there is thus a prospect of suitable house accommodation being provided for most of the foreign community. In the meantime all continue to live in unsuitable dwellings and amid unsanitary surroundings.

Some adequate provision for housing the Customs staff is urgently needed, not for the foreigners alone, but also for the natives. The latter must perforce rent houses in the town, which positively are not fit for human beings to dwell in (for I do not know of a single sanitary house in the native style). In times of sickness their sufferings are accentuated. A row of dwellings, having concrete floors, and open drains, bedrooms on the upper story, with windows admitting a sufficiency of light and air, and a rental not much in excess of that paid at present, would meet the needs of the case. They would be an object lesson to the town, and perhaps set the fashion of another and more healthy type of dwelling.

THE FOOD SUPPLY.

The milk, meat, and water supply remain in the same unsatisfactory condition as when last reported, nor is there any immediate prospect of improvement.

Some foreigners have used a still, of foreign pattern but native manufacture, which has recently been introduced here. It can be heated over an ordinary native fire. It is, theoretically, superior to a filter, inasmuch as distilled water is perfectly pure when carefully collected. To those whose drinking water is derived from the contaminated river brink or a well, and who have suffered from dysentery, such a still might prove a great boon.

STATE OF THE TOWN.

Wuchow, with a population of 40,000 or 50,000 inhabitants, has not evolved any methods of sanitation superior to those of a small neglected native village.

The streets, the drainage, the water supply, the public latrines, the disposal of rubbish and of the dead, continue in the same state of neglect as ever. Only recently there was to be seen in the vicinity of the town an uncoffined corpse surrounded by a pack of dogs. Not until the third day was the body buried. Such a sight is a disgrace to a town.

No effort at improvement has been made during the period under review, if we except one futile proclamation prohibiting pigs wandering about the streets. As might be expected, no heed was paid to the proclamation. A town as neglected as Wuchow has been is not to be cleansed by so easy and inexpensive a method as the issue of a single proclamation. Nothing less than the relaying of all the streets and the construction of waterworks will avail now. An epidemic of bubonic plague may be expected in the months of April, May, and June,—indeed, sporadic cases have already occurred this year.

HOSPITALS.

So far as I know, there is no hospital under foreign supervision in the whole of the Kwangsi province, nor do facilities exist either for studying the diseases of this province or for training medical students here. The native hospital, though built, is not in working order.

A free dispensary has been opened in the town by the American Baptist Missionary Society. It is in the charge of a former student of the Canton Hospital.

LEPROSY.

Leprosy exists in the town and neighbourhood, but not, so far as I am able to judge, to an alarming extent. Several lepers have applied to me for treatment. The cases have been mostly of the anæsthetic type. Lepers are allowed to dwell among their own people long after the distinct development of the skin and nerve affection. When spontaneous amputation of digits or leonine expression of countenance occur, the sufferer is usually banished from his home. Under the circumstances it is a marvel that the disease is not more prevalent. This seems to show that it might soon be stamped out by an early segregation of all the affected individuals.

CATTLE PLAGUE.

An epidemic of foot-and-mouth disease is raging amongst the water-buffaloes in the country between Wuchow and Takhing. I have had no opportunity of treating any of the affected cattle.

TABULAR VIEW.

A tabular view of some of the diseases which have occurred at Wuchow during the period under review is appended. For the meteorological table I am indebted to the Harbour Master.

TABULAR VIEW OF DISEASE AT WUCHOW, October 1898 to March 1899.

MONTH.	IMPERIAL MARITIME CUSTOMS STAFF.				
	FOREIGNERS.				NATIVES.
	Adults.		Children.	Residence.	
	Male.	Female.			
1898.					
October.....					Pleurodynia.
November.....	Malarial remittent fever.	—	Dysentery.....	Pontoon.	—
	Septicæmia.....			Boat.	—
December.....			Strumous glands.....	”	Malarial remittent fever.
1899.					
January.....	Dysentery.....			Native house.....	Hæmoptysis, malarial remittent fever.
February.....			Colic.....	Temple.	—
	Malarial remittent fever, tonsillitis.			Pontoon.	—
March.....					Dysentery.

MONTH.	FOREIGN RESIDENTS AND VISITORS.					
	MISSIONARIES.				MERCHANTS, ETC.	
	Adults.		Children.	Residence.	Adults.	Residence.
	Male.	Female.				
1898.						
October.....					Colic.	—
November.....			Scarlatina...	House in country.	Conjunctivitis....	Shop.
December.....			"	—	—	—
1899.						
January.....	—	—	—	—	—	—
February.....	Small-pox.....			Shop.	—	—
March.....	—	—	—	—	—	—

TABULAR VIEW OF DISEASE AT WUCHOW—*Continued.*

MONTH.	CHINESE RESIDENTS AND VISITORS.		
	MALE.	FEMALE.	CHILDREN.
1898.			
October.....	Rheumatoid arthritis, gutta rosea, hæmoptysis, carious teeth, tuberculosis (knee), psoriasis ulcer of cornea, bruise, eczema, colic, scalp wound, double dislocation of lower jaw, ascariæ, otorrhœa, abscess, granular ophthalmia, internal hæmorrhoids.	Lymphadenitis cervicalis, hæmorrhage from wounds, syncope, entropion psoriasis, uterine inertia (forceps delivery), malarial remittent fever.	Dysentery, congenital syphilis, angular curvature.
November...	Opium habit, epilepsy, lymphadenoma syphilitica, wounds of scalp and hand, strumous diathesis, ulcers, bronchitis, paraplegia, chronic rheumatism, alveolar abscess, hip disease, glaucoma.	Ague, tinea circinata.	—
December...	Malarial remittent fever, bronchitis, abscess, eczema, opium habit, lipoma, whitlow, tetanus, dislocation of femur, septicæmia, rheumatic arthritis, gleet, sporadic bubonic plague.	Dysentery, conjunctivitis, uterine inertia (forceps delivery), chronic rheumatism, bronchitis, toothache, malarial remittent fever.	Scarlatina.
1899.			
January.....	Malarial remittent fever, ulcers, eczema, tertiary syphilis, strumous glands, cataract, asthma, whitlow, abscess, gonorrhœa, cirrhosis of liver, abscess of antrum, rheumatic arthritis, anæmia, dropsy, Bright's disease, chronic rheumatism, bullet wound of neck and left lung, syphilitic rheumatism, internal hæmorrhoids, granular lids, tinea circinata.	Primipara (forceps delivery), ascariæ.	—
February.....	Strumous cervical glands, laryngitis, gastralgia, ascites, corneitis, malarial amaurosis, salivary fistula, bronchitis, inflammatory Bright's disease, small-pox.	Hæmoptysis, colic, tertiary syphilis.	Colic, scald.
March.....	Ague, malarial nephritis, phthisis, tertiary syphilis, asthma, eczema, psoriasis, scabies, chronic ulcer, perforating ulcer, wen, diarrhœa alba, fistula in ano.	Adherent placenta (removal of), dyspepsia.	Sporadic plague, anæsthetic leprosy, tuberculosis, otorrhœa, inflammatory Bright's disease, constipation.
	<i>Cattle.</i> —Foot-and-mouth disease.		

METEOROLOGICAL TABLE, October 1898 to March 1899.

MONTH.	THERMOMETER.						BAROMETER.		RAINFALL.	
	Maximum.	Minimum.	Maximum Mean.	Minimum Mean.	Maximum Dry.	Minimum Wet.	Maximum.	Minimum.	No. of Hours.	Quantity.
1898.	° F.	° F.	° F.	° F.			Inches.	Inches.		Inches.
October.....	92.0	60.0	85.7	64.1	89.0	61.0	30.250	29.840	2	0.06
November.....	91.5	45.0	79.9	57.2	84.0	45.0	30.520	29.880
December.....	79.0	44.0	72.1	47.7	77.0	44.0	30.500	30.080
1899.										
January.....	75.0	41.0	64.5	48.0	73.0	40.0	30.540	30.100	15½	0.40
February.....	84.0	45.0	67.9	51.3	82.0	44.0	30.500	29.930	59½	2.52
March.....	84.0	48.0	75.3	59.5	82.0	43.0	30.440	30.000	10	0.53

NOTE SUR UNE ÉPIDÉMIE DE "PESTE BUBONIQUE" OBSERVÉE À PING-S'HIANG (KOUANGSI) EN MAI- JUIN 1898.

Par le Docteur A. THOULON,

Médecin de la Marine Française, Chevalier de la Légion d'Honneur, etc.

SUR des renseignements parvenus depuis quelques jours à Longtcheou et signalant aux environs de Ping-s'hiang d'assez nombreux cas de mort attribués par les indigènes à la peste bubonique, M. le Consul de France m'invitait, le 22 mai, à aller constater le fait. Je me suis aussitôt en route.

Ping-s'hiang est une petite ville chinoise située dans le cirque du même nom, au pied même des collines calcaires qui forment la première zone de l'enceinte fortifiée du camp retranché de Liêng-chêng,* quartier général du commandant supérieur des troupes du Kouangsi. Elle se trouve à 40 kilomètres environ de Longtcheou et à 35 de Langson, par la route "militaire" très fréquentée qui la traverse. Elle compte 1,500 habitants, sous l'administration d'un *thou-quan*, petit chef aborigène. Extraordinairement insalubre comme toutes les villes chinoises, avec ses mares, véritables cuves à fermentation, avec ses maisons mal aérées, elle offre au développement des maladies épidémiques les conditions les plus favorables possible. Il est même surprenant que le typhus, le choléra et la peste qui règnent ici à l'état endémique ne fassent pas de ravages plus grands, que ceux qu'ils commettent, dans ces milieux où les règles de la propreté et de l'hygiène les plus élémentaires sont inconnues, et où bêtes et gens—touchante familiarité—grouillent pêle-mêle sous le même toit.

Dès notre arrivée nous controlâmes l'exactitude des renseignements fournis. Nous apprîmes que la maladie en question, connue des Chinois, le plus généralement, sous le nom de *yang-tzeu-ping* (maladie à bubons), et qu'on appelle ici *cheng-k'i ch'uang ping-sseu* (littéralement, "naître, apparaître bubon maladie mortelle"†), sévissait dans la localité, exclusivement, depuis à peu près un mois. Elle avait même choisi, de préférence, certains cantonnements; le *ya-meunn* du *thou-quan* avait ainsi fourni au fléau une large et coûteuse hospitalité: le chef de famille, sa femme, une de ses filles, d'autres parents, des domestiques—en tout, 14 personnes—y étaient mortes. Son apparition avait été précédée d'une grande mortalité de rats et de porcs. La mort se produisait, chez l'homme, du deuxième au cinquième jour en

* C'est à Liêng-chêng qu'éclata, en 1880, la terrible épidémie qui y fit, en moins de deux mois, un millier de victimes sur un effectif de 4,000 hommes environ. On compta, m'a-t-on dit, jusqu'à 50 décès en un seul jour. En 1891, nouvelle épidémie, moins sévère, à Liêng-chêng et à Longtcheou; de même, en 1893-94. En 1895, enfin, quelques cas isolés à Longtcheou.

† La peste est connue, au Yunnan, sous le nom de *yang-tzeu-ch'uang*; on la désigne, en cantonnais, par les termes *y-lao-shih*; les Thos l'appellent *than-p'ao-thai*. Elle porte beaucoup d'autres noms dont les plus répandus sont: *luan-tzeu-chêng*, *shu-y*, *piao-shé*, *tâ Fou t'ien-hsing chêng*, *kung-sseu-ting*.

moyenne, selon la gravité des cas, avec de la fièvre, des bubons, et, plus rarement, des "boutons noirâtres d'une espèce particulière, très douloureux," nous rapportèrent les gens interrogés.*

Le lendemain, on nous fit appeler; nous en observâmes deux cas, l'un datant de 24 heures, le second, au troisième jour. Le surlendemain et les jours suivants nous continuâmes à en voir de nouveaux.

À une énumération de symptômes plus ou moins vaguement décrits, nous étions à même de substituer une étude coordonnée de signes bien nets; aussi, notre hésitation ne fût-elle pas de longue durée et affirmâmes-nous le diagnostic de peste bubonique.

La période d'invasion—car je n'ai jamais pu voir de malades à la période d'incubation—se manifeste toujours ou presque toujours par une céphalalgie très vive qui n'a jamais fait défaut, par des vertiges et par une altération profonde des traits. La langue est recouverte d'un enduit blanchâtre crayeux, sauf sur les bords et la pointe, où elle reste rouge. Nous n'avons jamais rencontré la raie blenâtre que signalent certains auteurs. Les malades accusent des douleurs à l'épigastre et à l'abdomen, sans localisation précise. Nous n'avons jamais noté d'épistaxis. Remarquons d'ores et déjà que la forme hémorrhagique a été très rare au cours de cette épidémie; nous ne l'avons rencontré qu'une seule fois.

18 à 36 heures après, en moyenne, s'ouvre une nouvelle période. La température est très élevée—39°.5, 40°, 41°,—avec un pouls excessivement rapide—120, 140, 160 et plus; la respiration s'accélère considérablement—35, 40, 45. Le malade présente un état typhique prononcé. La céphalalgie est atroce; la peau, brûlante; la soif, inextinguible; les douleurs épigastriques et abdominales, augmentées. L'enduit dont la langue est recouverte prend ordinairement une teinte jaunâtre. Quelques vomissements d'aspect bilieux se produisent. La constipation, dans les cas observés par nous, a été la règle;† la quantité d'urine émise diminuée. Les téguments prennent une teinte subictérique.

Après un laps de temps de 12 à 30 heures, en moyenne, se sont montrés, suivant les cas, des bubons ou de simples engorgements ganglionnaires; ces derniers, spécialement accompagnés de pustules gangréneuses. En même temps, le corps se couvre de sueurs profuses coïncidant avec une rémission qui n'est bien marquée que dans les cas heureux et qui va alors en s'accroissant, pour se terminer en même temps que la fièvre, par la convalescence, du sixième au septième jour.

Au contraire, dans les cas à terminaison fatale, l'état typhique s'accroît. Alors, se manifestent des troubles d'origine nerveuse: soubresauts, trémulations fibrillaires, et contractions spasmodiques occupant les groupes musculaires du cou, de la poitrine et des membres supérieurs plus spécialement. On observe du strabisme supérieur convergent, de la déviation conjuguée des globes oculaires, de la mydriase. Les malades sont dans la stupeur ou le coma. Concomitamment ont éclaté les complications broncho-pulmonaires. Cet état se prolonge, dans les cas graves ordinaires, 24, 36 heures et plus, et les malades meurent dans le collapsus.

* C'est alors et après un télégramme résumant nos renseignements, que nous reçûmes du Gouvernement Général de l'Indo-Chine l'ordre de demeurer à Ping-s'hiang, pour y étudier cette épidémie.

† Un de mes prédécesseurs à Longcheou, M. le Dr. SIMOND, médecin de première classe des colonies, a fait la même remarque, au cours de l'épidémie de peste de 1893-94.

Dans les cas foudroyants, ces trois périodes se déroulent en quelques heures—48, en moyenne.*

OBSERVATION I.

Petite fille "tho," âgée de 5 ans. Habite le *ya-meunn* du *thou-quan*. Son père y décédé de la peste bubonique, ainsi que 13 autres personnes, les jours précédents.

25 mai.—Elle est malade depuis deux jours. À la région cervicale latérale gauche, siège une adénite très développée. Les ganglions offrent une masse bosselée, très dure au toucher, très douloureuse à la pression. La peau est rouge et tendue. La langue est couverte d'un enduit crayeux épais; la muqueuse buccale enflammée. Le thermomètre, dans l'aisselle, marque 39°.8; le pouls, petit, bat 160; la respiration, brève et saccadée, est à 50. Peau brûlante. Pas de vomissements; constipation depuis quatre jours; quantité des urines émises diminuée. Soif ardente. Le foie paraît normal; la rate est augmentée de volume. La malade est dans un état d'agitation extrême et se plaint constamment.

26.—La langue devenue jaunâtre est gonflée et fendillée. Les gencives sont recouvertes, ainsi que les lèvres et les dents, de fuliginosités. L'état d'agitation persiste avec des contractions musculaires et de véritables soubresauts tendineux dans les groupes des membres supérieurs. Yeux convulsés en strabisme supérieur convergent. Apparition de pustules gangréneuses à la région sternale et dans le dos. Température, 40°.1; pouls, 185; respiration, 50.

Dans la soirée le thermomètre est à 40°.7; le pouls à 192; la respiration à 58.

La mort survient vers minuit.

OBSERVATION II.

Jeune Chinois de 20 ans. Constitution moyenne. Habite le centre de la ville.

25 mai.—Malade depuis trois jours; aspect typhique. À la région cervicale, à droite et à gauche, adénite dont le développement efface les dépressions du cou et présente au toucher, sous la peau qui est rouge et congestionnée, deux masses indurées. Gêne respiratoire considérable. À l'auscultation, signes de congestion broncho-pulmonaire. Crachats striés de sang. Le thermomètre marque 40°; pouls, petit, battant 120. La langue est recouverte d'un enduit blanc-jaunâtre très épais. Sécheresse de la bouche. Pas de vomissements; constipation. Quantité d'urine émise dans les 24 heures presque normale. Soif intense. La rate et le foie paraissent normaux.

26.—Des pustules gangréneuses sont apparues au cou, dans le dos et à la face externe de la jambe droite. Trémulations fibrillaires dans les groupes musculaires du thorax et des avant-bras. Délire de paroles. Carphologie. Température, 40°.7; pouls, 130. Respiration stertoreuse.

Le malade meurt dans la soirée en état comateux.

* On trouvera peut-être que je me suis étendu avec beaucoup de complaisance sur une symptomatologie déjà connue; j'ai cru devoir le faire pour répondre à un désir qui m'avait été exprimé de voir décrites d'une façon minutieuse les manifestations de l'épidémie qui nous occupe.

OBSERVATION III.

Chinois de 18 ans. Constitution moyenne. Habite le centre de la ville.

25 mai.—Aurait de la fièvre depuis trois jours. Bubons cruraux, à droite, très douloureux à la pression. Zone d'inflammation considérable. Céphalalgie excessivement vive; vertiges. Température, 39°.4; pouls, 128; respiration, 42. Langue humide recouverte, sauf sur les bords et à l'extrémité, d'un enduit blanchâtre. Constipation. Quantité des urines émises en 24 heures normale. Douleurs assez vives au creux épigastrique. Le foie paraît normal; la rate est augmentée de volume.

26.—L'état du malade est sensiblement le même. A eu, dans la soirée, deux selles amenées par une purgation énergique. Miction normale. La peau est couverte de sueur. Température, 39°; pouls, 126; respiration, 37.

Le soir, température, 39°.1; pouls, 120; respiration, 38.

27.—Le malade accuse un peu de mieux dans son état général. Sueurs très abondantes. Un des bubons entre en voie de ramollissement. Le thermomètre est à 38°.8; le pouls à 110; la respiration à 34.

Le soir, température, 39°; pouls, 114; respiration, 35.

28.—Le mieux s'accroît. Au toucher, sensation bien nette de fluctuation du bubon. Sueurs toujours abondantes. Température, 38°; pouls, 99; respiration, 30.

29.—Le malade peut être considéré comme entré en convalescence. Température, 37°.3; pouls, 90; respiration, 26.

Le soir, même. Ses parents, sans avoir fait part de leur projet, le transportent à la campagne. Je l'ai perdu de vue.

OBSERVATION IV.

Chinois de 33 ans. Forte constitution. Habite le centre de la ville.

26 mai.—Malade depuis deux jours. À la région du pli de l'aîne, à droite et à gauche, gâteau dur, volumineux, très douloureux à la pression, constitué par le groupe ganglionnaire supérieur oblique. Peau brûlante. Thermomètre, dans l'aisselle, 40°.2; pouls, petit, à 125; respiration, 36. Langue recouverte d'un enduit blanchâtre peu épais; bords et pointe libres. Douleurs violentes au creux épigastrique avec sensation très pénible de chaleur intérieure. Céphalalgie très vive. Quelques vomissements d'aspect bilieux; pas de selle; urines rares; soif intense.

27.—Le malade délire depuis hier au soir; il est dans un état d'abattement très grand. Température, 40°.5; le pouls, très dépressible, bat 120; respiration, 40. Muqueuse buccale rouge, sèche, enflammée; pas de vomissements; la constipation persiste. Apparition de pustules gangréneuses à la région cervicale antérieure, dans le dos, à la fesse et à la cuisse droites. Conjonctivite intense de l'œil gauche.

Soir, température, 40°.6; pouls, 136; respiration, 48.

28.—Même état. Température, 40°.2; pouls, 128; respiration, 38.

Le soir, le thermomètre marque 40°.4; le pouls bat 134; et la respiration est à 42.

29.—Le malade est à la dernière extrémité. Contractions musculaires généralisées; mydriase. État de prostration. Température, 40°.9; pouls, 144.

On m'apprend que la mort est survenue, dans le coma, deux heures environ après ma visite.

OBSERVATION V.

Femme "tho," 50 ans. Habite une des extrémités de la ville.

27 mai.—Malade depuis quatre à cinq jours. Au-dessous du pli de l'aîne droite, dans le groupe ganglionnaire supérieur oblique, bubon volumineux, douloureux à la pression, avec zone inflammatoire très étendue. Température axillaire, 39°.2; pouls, 138. Gêne respiratoire considérable. Catarrhe broncho-pulmonaire. Langue recouverte d'un enduit crayeux épais. Deux petits vomissements se sont produits ce matin même, dont on n'a pu me déterminer la nature. Céphalalgie très intense. Constipation. La quantité d'urine émise dans les 24 heures est inférieure à la normale. Teinte subictérique des téguments.

28.—La malade est dans le coma. Gêne respiratoire extrême. Température, 39°.6; le pouls, misérable, est à 140. Anurie.

La mort a eu lieu dans l'après-midi.

OBSERVATION VI.

Garçon—métis de "Tho" et de Chinois,—âgé de 7 ans. Ses parents habitent au centre de la ville.

28 mai.—Malade depuis quatre à cinq jours. Au-dessous du pli de l'aîne gauche, tumeur volumineuse, douloureuse à la pression, formée de deux bubons accolés. Peau sèche, brûlante. Le thermomètre, à l'aisselle, marque 40°; le pouls bat 164. Langue gonflée et fendillée. État inflammatoire de la bouche et du pharynx. Enduit fuligineux des lèvres, des gencives et des dents. Constipation. Urines rares. Aspect typhique.

29.—Au moment où je revois le petit malade, il est mourant, avec des accidents cérébraux rappelant ceux de la méningite aigüe.

OBSERVATION VII.

Femme "tho," 40 ans. Habite le centre de la ville.

28 mai.—A de la fièvre depuis deux jours. Énorme gâteau ganglionnaire, très douloureux à la pression, siégeant à la région axillaire gauche. On sent, au toucher, trois tumeurs de volume différent. Aspect typhique. Peau sèche et brûlante. Température, 39°.6; pouls, 112; respiration, 39. Langue humide, recouverte d'un enduit crayeux. Douleurs vives à l'abdomen, autour de l'ombilic. Céphalalgie intense. Constipation. Quantité d'urine émise dans les 24 heures presque normale. Rate considérablement augmentée de volume; le foie paraît normal.

29.—La malade est dans un état profond d'abattement. Elle n'en sort que pour prononcer quelques paroles inintelligibles. Température, 39°.5; pouls, 110; respiration, 38. Des vomissements brunâtres, me dit-on, se sont produits hier dans la nuit. Pas de selles. Quantité d'urine diminuée.

Le soir, le thermomètre est à 39°.8; le pouls à 114; et la respiration à 38.

État comateux, dans lequel meurt la malade assez tard dans la soirée.

Des quelques observations précédentes, jointes à un bon nombre d'autres—que je ne rapporte pas ici pour éviter des répétitions fastidieuses,—il est permis de tirer les conclusions suivantes :—

Le symptôme dominant de la peste bubonique est un état typhique très prononcé du malade; il n'a jamais fait défaut.

Le bubon a existé dans la majorité des cas, siégeant de préférence aux aines, la gauche, de préférence. Lorsqu'il a cédé le pas à l'adénite non suppurée, celle-ci s'est emparé de préférence des ganglions cervicaux et sous-maxillaires. Bubons et adénite ont toujours été très douloureux; l'adénite variable d'intensité. Dans le cas de suppuration, un seul bubon, à l'exclusion des autres, s'il en existe plusieurs, subit cette transformation.

La fièvre est continue, à exacerbations vespérales peu accusées; elle atteint toujours 39°.5 et dépasse 40°, mais elle arrive rarement à plus de 41°.2.

Dans un tiers des cas, environ, sont apparues des pustules gangréneuses siégeant, par ordre de fréquence, au cou, au dos et aux membres; la zone d'infiltration et l'œdème ont toujours été très considérables.

Les complications broncho-pulmonaires ont été assez fréquentes; nous les avons rencontré dans un sixième des cas.

La forme hémorrhagique (épistaxis, hémoptysie, pétéchies) a été rare—un vingtième des cas.

Le volume du foie est, en général, normal; celui de la rate est toujours—ou presque toujours—augmenté considérablement.

Le vomissement bilieux se produit fréquemment.

La constipation est habituelle.

La quantité des urines émises pendant les 24 heures est diminuée. Les urines ne revêtent pas de caractère particulier de coloration. Nous avons noté de l'anurie plusieurs fois.

La durée de la maladie, dans les cas foudroyants, n'a pas dépassé 48 heures; dans les cas graves, la terminaison fatale a eu lieu entre le quatrième et le cinquième jour; dans les cas heureux, la convalescence a commencé avec la suppuration des bubons du sixième au huitième jour.

La mortalité, dans les cas que nous avons observés, a été de 90 pour cent.; dans l'ensemble des cas accusés, elle n'aurait été que de 86 à 87 pour cent.

Il aurait, du fait de cette épidémie, d'après les renseignements recueillis, disparu un peu plus du quinzième de la population de Ping-s'hiang. Contrairement à ce qui a été observé à Canton, au cours de la dernière épidémie, c'est parmi l'élément masculin adulte que la peste a fait, à Ping-s'hiang, le plus de victimes.

De l'enquête à laquelle nous nous sommes livrés, il résulte que l'épidémie qui nous occupe serait née sur place et pas descendue du Yunnan.

Nous sommes d'ailleurs convaincu, d'accord en cela avec les missionnaires et avec les autorités locales déjà vieilles dans la région, que la peste bubonique est, comme le choléra, endémique au Kouangsi.

RAPPORT MÉDICAL

DU 1^{ER} OCTOBRE 1898 AU 31 MARS 1899, SUR LA SITUATION
SANITAIRE DE MONGTZE,

Par le Docteur E. REYGONDAUD.

CLIMATOLOGIE.

MONGTZE est situé à 1,400 mètres d'altitude, dans une grande plaine entourée de montagnes de 1,800 à 3,000 mètres. Au nord de la plaine ces hauteurs s'abaissent très sensiblement; au sud une coupure très nette qui fait communiquer la plaine de Mongtze avec la vallée du Sin-shien-hô et une autre moins prononcée où passe une route peu fréquentée vers Manhao. La première de ces deux dépressions est située au S.S.E. de Mongtze, la seconde au S.S.O. Ce sont là les deux couloirs par lesquels arrivent les vents dominants de la région, ceux de S.S.O. en première ligne, puis ceux de S.S.E.

Il y a à Mongtze deux saisons bien tranchées: l'hiver ou saison sèche d'octobre à mai, et l'été ou saison pluvieuse de mai à octobre.

Baromètre.—Les moyennes vont sensiblement en montant pendant les mois d'octobre, novembre et décembre pour redescendre ensuite. Les variations diurnes sont peu sensibles; maximum et minimum ne diffèrent guère dans les 24 heures que de 3 millimètres au plus. Dès que les vents tournent à l'est une élévation barométrique se fait sentir avec abaissement notable de la température.

Thermomètre.—La température va progressivement en descendant d'octobre à janvier et commencement de février, où elle atteint son minimum. En mars elle remonte assez sensiblement. Cette année les chaleurs se sont prolongées plus que de coutume et l'hiver, à part quelques journées pendant lesquelles le ciel était couvert, n'a pas été froid; la plus basse température a été de + 2° centigrades, les 29 et 30 janvier et le 2 février.

Vents.—Les vents ont une direction constante. Excessivement rares sont ceux du nord, ouest et est. Ils oscillent du S.O. au S.E.; les plus fréquents sont du S.S.O. En hiver ils atteignent souvent une grande intensité. Été comme hiver ils soufflent de la même direction et ne diffèrent guère qu'en violence. À quoi est due cette constance de direction? C'est un point à élucider.

Pluies.—La saison d'hiver, caractérisée en général par une sécheresse très marquée, a été cette année assez pluvieuse. Les deux mois les plus secs de l'année, janvier et février, ont eu, le premier, 12^{mm}.11 de pluie; le deuxième, 11^{mm}.46.

Mois.	TEMPÉRATURES MOYENNES.		PRESSIONS BAROMÉTRIQUES MOYENNES.		PLUIE.		VENTS DOMINANTS.
	Maxima.	Minima.	Maxima.	Minima.	Journées pluvieuses.	Quantité de pluie.	
1898.	° C.	° C.				Mm.	
Octobre	23.9	13.7	655.6	653.8	6	16.76	N.E. pendant les 10 premiers jours ; S.S.O. le reste du mois.
Novembre	20.4	9.8	657.1	654.6	3	0.82	S.S.O. et S.O.
Décembre	15.5	7.1	658.6	656.7	5	2.80	" "
1899.							
Janvier	16.0	6.0	656.5	654.8	7	12.11	S.O. et S.S.E.
Février	17.9	7.2	655.6	653.8	4	11.46	S.S.O. ; S.S.E. les jours de pluie.
Mars	21.4	10.0	655.8	653.2	5	29.55	S.S.O. et S.S.E.

PATHOLOGIE: MALADIES OBSERVÉES.

Mongtze, du fait de sa situation, devrait se trouver dans des conditions parfaites de salubrité. Le climat est excellent, mais, comme dans toute ville chinoise, la saleté la plus repoussante règne en maîtresse partout, non seulement dans les rues où l'on rencontre à chaque pas des flaques d'eau croupie et puante, mais même dans les maisons où gens et animaux vivent sous le même toit au milieu des immondices. Il est donc tout naturel qu'une affection épidémique comme la peste, importée il y a de longues années, ait trouvé en ces lieux son foyer de prédilection. Pendant l'hiver le fléau couve sous la saleté pour faire son apparition tous les ans à l'arrivée des chaleurs et ravager la population.

À part la peste, dont aucun cas ne se produit en hiver, les affections les plus fréquentes sont: le paludisme, les affections stomacales, les bronchites, les affections oculaires et la gale. À la fin de décembre j'ai constaté quelques cas de grippe.

Le paludisme à Mongtze même n'existe pas. Les cas de fièvre paludéenne que j'ai pu observer s'étaient tous produits chez des gens venant de la vallée du fleuve Rouge, soit de Manhao, soit de Yuenkiang. Le *mauvais air* de Manhao est renommé parmi les chinois de Mongtze à tel point que les caravanes ne séjournent jamais à Manhao. Les mafous remontent de suite dans la montagne après avoir déchargé leurs bêtes.

La plus courante des affections stomacales est une gastrite toxique due à l'abus de l'opium.

Aux premiers froids j'ai eu à soigner en octobre deux cas de grippe et six en décembre.

Les affections oculaires sont des plus fréquentes et pour la plupart consistent en kératites et opacités anciennes de la cornée, de nombreux ptérygions.

La gale est très courante et cela n'a rien d'étonnant vu la saleté des individus.

Les chiffres suivants diront d'ailleurs suffisamment la fréquence de ces diverses affections:—

(EUROPÉENS (effectif, 7).

Dyspepsie	1	Abcès urinaire	1
Amygdalite	1		

INDIGÈNES.

Pathologie interne.

Bronchite	12	Rhumatisme articulaire	5
Gastrite opiacée	11	Hystéro-épilepsie	1
Bronchite catarrhale	2	Laryngite	1
Grippe	8	Athrepsie	2
Embarras gastrique	3	Emphysème pulmonaire	1
Fièvre paludéenne	9	Tuberculose pulmonaire	1
Anémie	1	Angine simple	1

Pathologie externe.

Plaies et ulcères	39	Adénite cervicale	1
Fracture du bras	1	Rhinite	1
Otorrhée	2	Gengivite	2
Entorse du poignet	1	Adénite crurale	1
Carie dentaire	6	Ptérygion	12
Phlegmon du bras	1	Iritis	1
Anthrax du dos	1	Blepharite	1
Varices	2	Conjonctivite	6
Phlegmon de la main	1	Kératite	9
Arthrite	1	Trichiasis	1
Contusion	5	Opacité de la cornée	12
Hémorroïdes	2	Pannus	1
Abcès costal	1	Atrophie de la papille	1
Luxation de l'index	1	Synblepharon	1
Douleur sciatique	1	Cataracte	1

Maladies cutanées et vénériennes.

Eczema	4	Blennorrhagie	2
Herpès circiné	2	Syphilis	6
Gale	15		

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